CLAIMS

What is claimed is:

1. A noise attenuation system comprising:

a speaker;

a control unit in communication with said speaker; and

a memory unit in communication with said control unit storing cancellation waveform data related to a system condition.

2. The active noise attenuation system of claim 1 wherein said system condition is engine data.

3. The active noise attenuation system of claim 2 wherein said engine data is engine speed.

4. The active noise attenuation system of claim 1 further including at least one sensor in communication with said control unit.

5. The active noise attenuation system of claim 4 wherein said sensor is a tachometer.

6. The active noise attenuation system of claim 4 wherein said sensor is a throttle position sensor.

7. The active noise attenuation system of claim 4 wherein said sensor is an environmental sensor.

8. The active noise attenuation system of claim 1 wherein said speaker is disposed as part of an air induction system.

9. An air induction system comprising:

an air duct body having a speaker;

a control unit in communication with said speaker;

a memory unit in communication with said control unit storing cancellation waveform data wherein said cancellation waveform data comprises at least one cancellation waveform related with engine data.

10. The active noise attenuation system of claim 9 wherein said engine data relates to engine speed.

11. The active noise attenuation system of claim 9 further including at least one sensor in communication with said control unit.

12. The active noise attenuation system of claim 11 wherein said sensor is a tachometer.

13. The active noise attenuation system of claim 11 wherein said sensor is a throttle position sensor.

14. The active noise attenuation system of claim 11 wherein said sensor is an environmental sensor.

15. The active noise attenuation system of claim 11 wherein said speaker is disposed about an air induction system.

16. A method of attenuating noise comprising the steps of:

storing in memory at least one cancellation waveform;

retrieving the cancellation waveform needed to attenuate a noise based upon a sensed engine condition; and

attenuating the noise using the cancellation waveform.

17. The method of claim 16 wherein the noise relates to engine noise.

18. The method of claim 16 wherein the at least one cancellation waveform is related with engine speed and is retrieved and used to attenuate the noise.

19. The method of claim 16 wherein the noise is attenuated about air induction system.

20. The method of claim 16 further comprising the step of scaling the cancellation waveform.